Amendments to the Claims

1. *(Original)* A method of generating information symbols, comprising: (a) turning on, for an i^{th} predetermined length of time, during an i^{th} time period, x_i frequency carriers, where $0 \leq x_i \leq n$, and $1 \leq i \leq n$; (b) determining whether $n - \sum x_i = 0$; and (c) if the determination of (b) is negative, repeating (a) through (b); wherein x_i represents an integer number of frequency carriers, and n represents a total number of available frequency carriers.

2. *(Original)* The method of Claim 1, further comprising: (d) if the determination of (b) is affirmative, waiting for a period of time.

3. *(Original)* The method of Claim 2, further comprising: subsequent to waiting for the period of time, repeating (a) through (c).

4. *(Original)* The method of Claim 3, wherein the period of time is a predetermined guard band that is disposed between information symbols.

5. *(Original)* The method of Claim 4, wherein the information symbols occupy a frequency bandwidth greater than 500 MHz.

6. *(Currently Amended)* A method of transmitting symbols, each symbol having n modulation symbol times, with a transmitter having a set of n frequency carriers, comprising: providing ~~(302)~~ data to be transmitted; and determining ~~(304),~~ based at least in part on the provided data, which frequency carriers, if any, of the set of n frequency carriers, are to be turned on during each of the n modulation symbol times, each modulation symbol time being of a predetermined amount of time; and turning on ~~(306)~~ each of the frequency carriers as determined in (b) during each of the modulation symbol times; wherein each frequency carrier must be turned on for a period of time not greater than the modulation symbol time; and wherein each frequency carrier is turned on only once during the transmission of the symbol.

7. *(Original)* The method of Claim 6, wherein at least one modulation symbol time has no frequency carriers turned on.

8. *(Original)* The method of Claim 7, wherein at least one modulation symbol time has at least two frequency carriers turned on.

9. *(Original)* The method of Claim 8, wherein a BPSK modulation is used.

10. *(Original)* The method of Claim 6, wherein if n frequency carriers are turned on in one modulation symbol time, then no frequency carriers are turned on in the other n-1 modulation symbol times.

11. *(Original)* The method of Claim 6, wherein the transmitted symbols occupy a frequency bandwidth greater than 500 MHz.

12. *(Original)* The method of Claim 6, wherein the transmitted symbols occupy a frequency bandwidth greater than 2 GHz.

13. *(Original)* The method of Claim 11, wherein the n frequency carriers transmit signals in n contiguous frequency bands, and n is an integer.

14. *(Original)* The method of Claim 11, wherein the n frequency carriers transmit signals in n non-contiguous frequency bands, and n is an integer.

15. 1. *(Original)* A method of transmitting ultra wideband symbols, comprising: (a) turning on, for an i^{th} predetermined length of time, during an i^{th} time period, x_i frequency carriers, where $0 \leq x_i \leq n$, and $1 \leq i \leq m$; (b) determining whether m time periods have expired; and (c) if the determination of (b) is negative, repeating (a) through (b); wherein x_i represents an integer number of frequency carriers, n represents a total number of available frequency carriers, and m represents a total number of time periods contained within each of the ultra wideband symbols.